REMARKS

Applicant has amended claims 1-4 to correct the grammatical errors and to clarify the claims.

In the aforementioned Office Action claims 1-3 were rejected under 35 U.S.C. 102(b) as being anticipated by Nagamine et al (U.S. Patent 4,937,422).

In analyzing the aforementioned rejection it is recognized that the cited reference discloses a method of correcting laser beam output power which is capable of automatically correcting long and short term variations in the output power of a laser beam. The method of Nagamine et al. includes the steps of:

a) measuring an actual laser beam output power with an output measuring device with respect to a laser beam output power command value when a laser is initially energized;
b) determining a correcting coefficient from said laser beam output power command value and said actual laser beam output power; and
c) correcting said laser beam output power command value of the cutting machine to produce a laser beam output power equal to the command value by referring to the correcting coefficient in an actual cutting operation.

As shown in the reference, during an actual cutting process, a numerical value produced by multiplying a command value by a correcting coefficient is used as an actual command value, and the acute laser beam output power can thus be obtained at all times such that the laser beam output can consequently be corrected accurately while the laser control system is being maintaining stably.

In contrast, the claim 1 of present invention, from which the remainder of the rejected claims directly depends, recites operation methods neither taught nor suggested in the cited

reference. In the present invention, once the laser is in a low energy state before emission, **a preset pulse is used to charge the laser system to increase the reaction speed of the laser**, and the width of the pulse is determined by the time when the laser system is turned off and the characteristic of the laser. However, the cited Nagamine reference multiplied the command value by a correcting coefficient so as to obtain an actual command value.

Therefore, the operation of present invention is quite different from that of the cited reference wherein the actual laser outputting is not charged by another pulse energy.

In addition, the cited Nagamine reference does not disclose all the elements identical or similar to those described in claim 1, such as the short pulse for additional energy supplies, the table indexed by laser off time, and the reference table used for recording compensation power value required for each corresponding one of the reaction time values.

Moreover, the cited reference cannot solve the problem to be solved by the present invention. For example, components of an outputting graphic are not all continuous lines or planes, and the construction of the graphic will also have some gray levels, deep and shallow tints, so that the output of the **laser tube often gets a state of non-stop on/off**, that is, most processing actions are within the unstable positions in the drawing. The present invention uses a look-up table to facilitate the determination of required laser beam output. However, as the cited Nagamine reference is in excess of a limit value, the laser beam output must be turned off that no laser beam output can be turned on in view of safety requirements. Thus, the cited reference is inefficient in use when compared to the present invention.

Regarding of claim 2, the cited reference does not disclose any identical or similar operation step that divide the unstable working area into n sections.

In view of the foregoing, since the subject matter of present invention was not described and anticipated in the cited Nagamine reference, and the compensation for laser outputting power of the Nagamine reference is obviously different from that of present invention, the prima facie

rejection is insufficiently supported, and the independent claim 1 should be allowable over the cited Nagamine reference. A similar argument applies to the dependent claims 2-3. Therefore, the present invention has not been disclosed in the prior arts, and is not obvious from the prior arts because of the difference.

B. Regarding Claim Rejections under 35 U.S.C. 103(a)

Claim 4 was rejected under 35 U.S.C. 103(a) as being unpatentable over Nagamine et al. (U.S. Patent No. 4,937,422) hereinafter '422 in view of Barbour (U.S. Patent 6,318,828) hereinafter '828.

Neither Nagamine or Barbour, taken alone or in combination, teach the method of the present invention. First, the method to compensate the laser outputting power of the present invention is to charge the laser system to increase the reaction speed of the laser by a preset pulse. However, the Nagamine reference fails to disclose or suggest such a method. In the other hand, it is conceivable that the Barbour reference is obviously not from the same field of the present invention.

As a consequence, the features of present invention are not obvious and are not anticipated by the cited prior art.

Since all of the claims are now in proper form and clearly distinguished over the cited art prompt favorable action is respectfully submitted.

To the extent necessary, a petition for an extension of time under 37 C.F.R. 1.136 is hereby made. Please charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, to Deposit Account 07-1337 and please credit any excess fees to such deposit account.

Respectfully submitted,

LOWE HAUPTMAN HAM & BERNER, LLP

DAVID E. DOUGHERTY
Registration No. 19,576

1700 Diagonal Road, Suite 300
Alexandria, Virginia 22314
(703) 684-1111
(703) 518-5499 Facsimile
Date: December 20, 2007
DED/eem